



# OMNIS Software

Technical Specifications

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# Software Licenses

## WHAT CAN BE LICENSED IN OMNIS STAND-ALONE?

Software License Bundle	Start OMNIS Software	Allowed number of OMNIS devices or RS232 instruments	Activate Compliance	Activate Data Integration	Activate Quant development	Activate Ident development	Activate Report Template Designer
OMNIS Stand-Alone license with 1 Instrument 6.06003.010	1	1	-	-	-	-	-
OMNIS Stand-Alone license with 2 Instruments 6.06003.012	1	2	-	-	-	-	-
OMNIS Stand-Alone Instrument license 6.06002.010	-	1	-	-	-	-	-
OMNIS Stand-Alone Instrument license 6.06002.012	-	5	-	-	-	-	-
OMNIS Stand-Alone Instrument license 6.06002.013	-	10	-	-	-	-	-
Compliance/Regulation Stand-Alone 6.06004.010	-	-	+	-	-	-	-
3rd Party Data Integration Stand-Alone 6.06004.020	-	-	-	+	-	-	-
Quant development license Stand-Alone 6.06008.002	-	-	-	-	+	-	-
Ident development license Stand-Alone 6.06008.003	-	-	-	-	-	+	-
Report Template Designer Stand-Alone 6.06004.030	-	-	-	-	-	-	+

## WHAT CAN BE LICENSED IN OMNIS CLIENT/SERVER?

Software License Bundle	Start OMNIS Software on OMNIS Client	Allowed number of OMNIS devices or RS232 instruments	Activate Compliance	Activate Data Integration	Activate Quant development	Activate Ident development	Activate Report Template Designer
OMNIS Client/Server license with 1 Instrument 6.06003.110	For 500 Clients	1	-	-	-	-	-
OMNIS Client/Server Instrument license 6.06002.110	-	1	-	-	-	-	-
OMNIS Client/Server Instrument license 6.06002.111	-	5	-	-	-	-	-
OMNIS Client/Server Instrument license 6.06002.113	-	10	-	-	-	-	-
OMNIS Client/Server Instrument license 6.06002.114	-	25	-	-	-	-	-
Compliance/Regulation Client/Server 6.06004.011	-	-	For 500 Clients	-	-	-	-
3rd Party Data Integration Client/Server 6.06004.120	-	-	-	For 500 Clients	-	-	-
Quant development license Client/Server 6.06008.102	-	-	-	-	For 500 Clients	-	-
Ident development license Client/Server 6.06008.103	-	-	-	-	-	For 500 Clients	-
Report Template Designer Client/Server 6.06004.130	-	-	-	-	-	-	For 500 Clients

# Technical Specifications

## OPERATING SYSTEM

The following operating systems are supported for the installation of the OMNIS Software.			
Installation type	Operating system	Editions	Version
OMNIS Stand-Alone	<ul style="list-style-type: none"> <li>Windows 11, version 24H2 (OS build 26100.6725) or higher</li> <li>Windows 10, version 21H2 (Enterprise LTSC 2021)</li> </ul>	Pro, Enterprise	64-bit
OMNIS Server incl. 1 OMNIS Client	<ul style="list-style-type: none"> <li>Windows Server 2019, version 1809 (OS build 17763.107) or higher</li> <li>Windows Server 2022, Version 21H2 (OS build 20348.169) or higher</li> <li>Windows Server 2025, version 24H2 (OS build 26100.4652) or higher</li> </ul>	Standard, Datacenter	64-bit
OMNIS Client	<ul style="list-style-type: none"> <li>Windows 11, version 24H2 (OS build 26100.6725) or higher</li> <li>Windows 10, version 21H2 (Enterprise LTSC 2021)</li> </ul>	Pro, Enterprise	64-bit

All Service Packs or current feature updates must be installed.

## USING VIRTUAL MACHINES

- When installing an OMNIS Client/Server system, the OMNIS Server can be installed on a virtual machine. Metrohm recommends not installing OMNIS-Stand-Alone or OMNIS Client on a virtual machine.
- The OMNIS Server can also be operated on a virtual machine in Microsoft Azure in the cloud. The installation of the SQL server on Azure Virtual Machines is supported for the external database server: [Database server](#)
- If certain hardware properties of the virtual machine change after installation (e.g. CPU type), then the license container of the OMNIS Software will be rendered invalid. The regional Metrohm representative must be contacted to repair the license container.

## USE OF SNAPSHOTS AND WINDOWS BACKUPS

- If a snapshot or Windows backup is used and restored, a licensing error will occur. The regional Metrohm representative will always need to be contacted if the OMNIS Software needs to be transferred to another computer or if the computer needs to be set up once again.

## DATABASE SERVER

If an external database on a dedicated Microsoft SQL Server is used, the following versions are supported:

Name	Service Pack	Editions
Microsoft SQL Server 2019	CU4	Standard, Enterprise
Microsoft SQL Server 2022	RTM	Standard, Enterprise
Microsoft SQL Server 2025	RTM	Standard, Enterprise

The external database server can also be operated on a virtual machine in Microsoft Azure or Amazon Web Services (AWS) in the cloud. The following versions are supported by OMNIS Client/Server for the configuration of the database server:

- Virtual machine in Microsoft Azure
- SQL Server on Azure Virtual Machines
- Azure SQL Managed Instance
- Azure SQL Database
- Amazon RDS (Relational Database Services)

## SYSTEM COMPONENTS

For optimal use of the OMNIS Software with multiple connected instruments (e. g. titrators, sample robots, sample changers), the recommended configuration must be used. If the OMNIS system is operated with only 1 instrument, only the minimum requirements must be met.

System requirements for OMNIS Stand-Alone or an OMNIS Client in the OMNIS Client/Server system

Component	Recommended	Minimum
Processor	<ul style="list-style-type: none"> <li>- Intel Core i7 or better</li> <li>- Intel Xeon</li> <li>- AMD Ryzen</li> <li>- Intel Core Ultra 5 or better</li> </ul>	<ul style="list-style-type: none"> <li>- Intel Core i5</li> </ul>
RAM	<ul style="list-style-type: none"> <li>- When using automation systems: 32 GB</li> </ul>	<ul style="list-style-type: none"> <li>- When using only one device (e.g. a titrator): 8 GB</li> <li>- With minimal RAM availability, no other memory-intensive programs may be executed.</li> </ul>
Hard disk	Solid-state drive (SSD)	Solid-state drive (SSD)
Free space	100 GB	30 GB
Graphics adapter	DirectX 12.0 level graphics adapter or newer	DirectX 12.0 level graphics adapter or newer
Screen	Resolution: 1920 x 1080 Scaling: 100%	Resolution: 1440 x 900 Scaling: 100%

System requirements for the OMNIS Server in the OMNIS Client/Server system

Component	Recommended	Minimum
Processor	<ul style="list-style-type: none"> <li>- AMD EPYC</li> <li>- Intel Xeon</li> <li>- 4 processor cores</li> <li>- Clock frequency <math>\geq</math> 2.5 GHz</li> </ul>	<ul style="list-style-type: none"> <li>- Intel Core i7</li> <li>- 4 processor cores</li> <li>- Clock frequency 2 GHz</li> </ul>
RAM	32 GB	<ul style="list-style-type: none"> <li>- 16 GB</li> <li>- With minimal RAM availability, no other memory-intensive programs may be executed.</li> </ul>
Hard disk	Solid-state drive (SSD)	Solid-state drive (SSD)
Free space	100 GB	30 GB
Graphics adapter	DirectX 12.0 level graphics adapter or newer	DirectX 12.0 level graphics adapter or newer
Screen	Resolution: 1920 x 1080 Scaling: 100%	Resolution: 1440 x 900 Scaling: 100%

System requirements for the external database server in the OMNIS Client/Server system

Component	Recommended	Minimum
Processor	<ul style="list-style-type: none"> <li>- AMD EPYC</li> <li>- Intel Xeon</li> <li>- 4 processor cores</li> </ul>	<ul style="list-style-type: none"> <li>- Intel Core i7</li> <li>- 4 processor cores</li> </ul>
RAM	20 to 25% of the expected database size (e.g. 128 GB RAM with 500 GB database size)	20 to 25% of the expected database size (e.g. 128 GB RAM with 500 GB database size)
Hard disk	Storage Attached Network (SAN) or RAID system	Solid-state drive (SSD) OS and databases on separate disks
Free space	At least 2½ times the expected database size	At least 2½ times the expected database size

## SETTINGS AND PORTS

**Regardless of the system configuration, the following ports and, if necessary, corresponding settings are required in the network**

Serial	for instruments with an RS-232 interface
USB	for USB flash drives and USB devices
Ethernet	100 Mbit/s

### Ports for communication with instruments

TCP 9113, TCP 9114, TCP 5001, TCP 9117, UDP 69, UDP 9114, UDP 9115, UDP 9116

Additional COM ports require additional TCP ports (1 TCP port per COM port each): TCP 9135, TCP 9136, TCP 9137, TCP 9138, TCP 9139, ...

### Additional ports Ports for communication with local services (database, licensing)

Inbound and outbound TCP 1433, TCP 1434, TCP 22350, UDP 1434

### Additional ports for OMNIS Server communication in the OMNIS Client/ Server system

Secure port For inbound and outbound connections by default:

- TCP 6800 (Main)
- TCP 6802 (C1-PV)
- TCP 6804 (OQ-FS)
- TCP 6900 (CentralServiceHost)
- TCP 22350 (Codemeter)

Or self-defined ports.

### Additional ports for the communication with third-party software (Web API)

Web API port For inbound and outbound connections by default:

- TCP 5002 or self-defined ports.

Identity server port For inbound and outbound connections by default:

- TCP 5003 or self-defined ports.

### Additional ports for communication with Active Directory

Standard For inbound and outbound connections by default:

- TCP 53, TCP 88, TCP 389, TCP 636, UDP 53, UDP 88, UDP 389

**NOTICE:** In the OMNIS Client/Server system, these ports must be opened on the OMNIS Client.

### Additional ports for communication with external database server

Standard For inbound and outbound connections by default:

- TCP 1433, TCP 1434, UDP 1434

### Ports for communication with external database server (Microsoft Azure)

Inbound and outbound TCP 3342, TCP 5022, TCP 11000-11999

## NETWORK

Ethernet	100 Mbit/s with cable category 5
Router or LAN	100 Mbit/s, stable and permanent
DHCP server (optional)	Available, if required
Communication	via TCP/IP
NIC Teaming	Static virtual MAC address. Alternatively, it must be ensured that the MAC address does not change.

## BROWSER

Microsoft Edge	keep current from version 92.0.902.55
Google Chrome	from version 89
Mozilla Firefox	from version 4

